

WHAT IS CLAIMED IS:

1. A motor apparatus including:

a motor having a drive shaft;

first damper means mounted on the drive shaft of
5 said motor, said first damper means reducing vibration
caused during acceleration for raising up to a target
speed from the start of the driving of said motor; and

second damper means mounted on the drive shaft of
said motor, said second damper means reducing vibration
10 caused during the constant speed driving of said motor.

2. A motor apparatus according to Claim 1,
wherein said first damper means is a rubber damper, and
said second damper means is a magnet damper.

15 3. A motor apparatus according to Claim 2,
wherein said rubber damper comprises rubber mounted on
the drive shaft of said motor, and an inertia member
mounted on said rubber, and said magnet damper
20 comprises a magnet mounted on an iron hub mounted on
the drive shaft of said motor, through a pulley.

4. A motor apparatus according to Claim 2,
wherein said first damper means is a damper effective
25 at a frequency vibrated and attenuated with the
characteristic of a load by impulse response at the
start of acceleration.

5. A motor apparatus according to Claim 3,
wherein said magnet damper is mounted so that during
acceleration, inertia applied to the motor shaft may be
small and during a constant speed, sufficient inertia
5 may be applied to the motor shaft.

6. A motor apparatus according to Claim 1,
wherein as compared with said first damper means, said
second damper means is great in inertia.
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7. A motor apparatus according to Claim 1,
wherein said motor is used as a motor for driving the
moving mechanism of an image reading apparatus.

8. A motor apparatus for driving the movable
member of an image reading apparatus, including:
15 a moving mechanism for driving a movable member
for image reading;

a motor for driving said moving mechanism, said
20 motor having a drive shaft;

a rubber damper as first damper means mounted on
the drive shaft of said motor, said rubber damper
reducing vibration caused during acceleration for
raising up to a target speed from the start of the
25 driving of said motor; and

a magnet damper as second damper means mounted on
the drive shaft of said motor, said magnet damper

reducing vibration caused during the constant speed driving of said motor.

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